Docket No. SA-532 Exhibit No. 6-C

NATIONAL TRANSPORTATION SAFETY BOARD

Washington, D.C.

Attachment 2

US Airways Flight Attendant Initial Training Materials

(48 Pages)



Inflight Training New Hire

WATER LANDINGS II (EOW)

Objective: The candidates will be able to:

Identify and use equipment on a raft or slide/raft.

Explain how to use and operate items in a survival kit.

State answers to procedures for planned/unplanned water landings.

Conduct an ABP briefing for a window and a door.

Time: 2:30 (Requalification/Transition time may vary)

Method: Lecture: Question & Answer / Candidate Teach: Hands-On Demonstration

Training Aids: * PPT: W:\Initial Menu\Week Three\Water Landings II (Initial Only)

* REQUAL ONLY: Copies of Survival Handout

* VHS Video: ACCIDENTS & INCIDENTS

* VHS Video: Water Evacuation & Survival

* Laminated Survival Kit Equipment * Laminated Raft Equipment Cards * Raft/CLT - Slide Raft/PHX

* IEM

* Life Vest (in Raft Room)

* Hand Pump, ELT and ELT Photo

* Case/Raft (in Raft Room)

* Equipment Board

Survival Kit Contents:

- Repair Kit

- Flare (Metal/Sky Blazer/Mini) - Water Activated Flashlight

- Whistle - Manuals (Raft & Survival)

- Sea Dve Marker

- Water Purification Tablets

- Light Safety Stick (B767)

- Hand Pump

- Charms

- Water Canteen - First Aid Supplies

- Utility Knife - Sponge

- Bailing Bucket

- Canopy & Rods (Raft Room)

- Signaling Mirror

Prerequisites: * Water Landings I – (Non-EOW)

* Planned Emergencies

* ABP Briefing - Land Evacuation

* Unplanned Emergencies

Homework: N/A

Proficiency: N/A

Instructor Prep: Set-up Survival Kit Contents in front of the room for use in the exercise. Locate IEM page number

references throughout the lesson. (Requal Only) Print Survival Handout from the ext. requal folder (W:\Curriculum\Extended Requalification\Training Aids\Survival Handout) and make

enough copies for Requal students.

F.A.R. Training Requirement: 121.417(b)(1) Instruction in emergency assignments and procedures, including coordination among crewmembers. 121.417 (2)(i) Individual instruction in the location, function, and operation of emergency equipment including equipment used in ditching and evacuation;121.417 (3)(iii) Instruction in the handling of emergency situations including ditching and other

> CURRICULUM: Initial New Hire SEGMENT: General Emergency MODULE: Emergency Situations AUTHOR: D.A.

FILENAME: w:\curriculum\initial new hire\emergency procedures\original\water landings II (eow).doc REVISED: 03/24/08 EMK

I. INTRODUCTION

A. Opening

- 1. We will begin by exploring Extended Overwater (EOW) procedures.
- 2. First, we will view a video depicting past accidents and incidents.
- 3. **SHOW** video Accidents and Incidents (15 minutes)

SHOW VIDEO

B. Objective & Agenda

PPT #1 - TITLE

- 1. Following this lesson you will be able to:
 - Identify and use equipment on a raft or a slide/raft.
 - Explain how to use and operate items in a survival kit.
 - State answers to procedures for planned/unplanned water landings.
 - Conduct an ABP briefing for a window and a door.
- 2. As mentioned in the video, the key to survival in the event of a water landing is to be prepared.
- 3. Since 1982 the airline industry, along with the FAA, has taken steps to educate and prepare crews in the event of a water landing.
- 4. Today we will accomplish this by reviewing the following:
 - EOW definition
 - Equipment found on board an EOW-equipped aircraft
 - Three (3) S's of Survival
 - US Airways Procedure
 - Participate in a Raft Drill (Dry) (following this lesson)

II. EOW

A. Definition

- 1. EOW-Equipped Aircraft
 - Aircraft equipped to fly planned routings more than
 50 nautical miles from the nearest shoreline.

- Can exceed travel beyond 162 nautical miles.
- 2. The FAA requires that each certified air carrier operating extended overwater aircraft must have these six pieces of equipment present and in working condition:
 - Life vest
 - Survival kit
 - Life raft (slide/rafts or rafts)
 - Emergency locator transmitter (ELT)
 - Pyrotechnic signaling device (Flare)
 - Life lines
- 3. **Instructor note:** We will discuss these items in further detail throughout the lesson.
- B. EOW Aircraft
 - 1. Some A320
 - 2. Some A319
 - 3. Some B757
 - 4. B767
 - 5. A330

III. EOW FLOTATION EQUIPMENT

A. Life Vest (Review)

PPT #2 - LIFE VESTS

- 1. Primary means of flotation for F/A, pilots and passengers.
 - One per seat occupant, equipped with locator light.
- 2. The life vest announcement must be read verbatim from the departure section of the announcement booklet.
- 3. **ASK:** When will a life vest demonstration be required? **ANS:** Travel more than 50 nautical miles from the nearest shoreline. Captain advises F/As to perform a life vest demonstration.
- 4. **ASK:** What color life vests are for passengers/crew?

ANS: Passenger – Yellow Crew – Orange

5. **ASK:** When and how do you inflate life vests?

ANS: When: After exiting the A/C.

How: Inflate one chamber by pulling on the red tab.

6. ASK: If you pull the first tab, and the life vest does not inflate, what will you do next?ANS: Pull the second red tab.

7. **ASK:** If your life vest still does not inflate, what would you do?

ANS: Manually blow into one of the two red tubes.

8. In addition to one life vest per seat occupant, there will be ten infant life vests on board.

B. Seat Cushion

PPT #3 - SEAT CUSHION

- 1. Additional means of flotation.
- 2. **ASK:** How would you hold the seat cushion? **ANS:** Place arms through straps, hug close to chest with the lip end of the cushion underneath your chin.
- 3. **ASK:** When do you place arms through the straps? **ANS:** After exiting the A/C.
- 4. **ASK:** What would you do if a passenger came to the exit with no flotation device?

ANS: Make them exit. When time permits, F/A will throw a life vest and/or seat cushion to him/her. Ask other passengers to assist them, and direct them to the lifelines.

C. Slides PPT #4 - SLIDE

- 1. Some EOW-equipped A/C may have slides at certain doors and slide/rafts at others (i.e., B757-200 EOW 3L & 3R contain slides).
- 2. The slide is used only as an auxiliary flotation device.
 - Passengers hold onto from outside using life lines.
 - A hollow side allows a limited amount of people inside e.g. injured/elderly/infants.
- 3. Once the door is opened, the slides must be quick-released.

4. Once the slide is quick-released, a life raft may be retrieved and deployed to provide flotation and improved survivability, time permitting.

- We will talk more about life rafts later in this module.

D. Slide/Rafts

PPT #5 - SLIDE/RAFT (B757)

- 1. Packed on A/C door, just like evacuation slides.
- 2. Dual purpose:
 - Slide on land
 - Raft in water
- 3. Equipped with water activated locator lights.
- 4. Designed to hold passengers for better survivability.

PPT #6 - SLIDE/RAFT (B767)

- The number of passengers that a slide/raft can hold varies due to manufacturer or model.
- 5. Once a slide/raft is inflated, direct the passengers into the slide/raft.
 - After everyone has boarded, including the raft commander, pull the quick-release handle under the flap marked, "FOR DITCHING ONLY."
- 6. The slide/raft with occupants will be released from the A/C, yet remain attached via a mooring line.
 - Can detach from A/C if necessary
- 7. The raft commander is determined by crewmember position and must establish authority, control and leadership from the onset of a water landing.

E. Life Rafts

PPT #7 - LIFE RAFT

- 1. Located in ceiling compartments of B757.
- 2. Equipped with water activated locator lights.
- 3. Capacity: 46 Overload: 69
 - The capacity and overloads are always written on the raft with bold black print.

- 4. Unique feature:
 - It is completely functional on both sides.
- 5. If you find yourself in the water, board raft via boarding stations.
- 6. Direct passengers to:
 - Stay low and crawl
 - Sit facing inward
 - Distribute weight evenly

IV. LIFE RAFT

- A. Components and Equipment
 - 1. Bold print labels on the raft identify equipment and raft component locations. Each 46-person raft has:
 - 2. Hand Pump stored in a protector pouch along the rafts outer perimeter.

PPT #8 - HAND PUMP

- The hand pump is used to inflate the raft by inserting it into the inflation valves and pumping.
- 3. Inflation Valves there are three inflation valves.

PPT #9 - INFLATION VALVES

- Manual top chamber inflation valve inflates the upper tube.
- Manual lower chamber inflation valve inflates the lower tube near the raft floor.
- Deck float (Torus Tube) inflation valve inflates the center support for the raft floor.
 - Adds buoyancy once manually inflated.
- 4. Locator Lights mounted for assisting rescue of survivors PPT #10 LOCATOR in water. LIGHT

 The locator lights automatically illuminate when the raft goes into the water and are powered by water activated battery.

5. Boarding Stations - boarding ladders, as well as straps, assist survivors into the raft.

PPT #11 - BOARDING STATION

• They are permanently attached on opposite ends of the raft.

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6. Lifelines - surround the raft to provide a means for survivors to hold on to until they can be assisted in boarding the raft.

PPT #12 - LIFE LINES

- 7. Heaving Ring used to pull survivors to the raft. The ring PPT #13 HEAVING RING is tossed into the water near evacuee. Have survivors flip over onto their back to prevent swallowing water while pulling them to the raft.
- 8. Knife mounted on the raft to cut the Mooring Line. The knife is shaped so that it will not puncture the raft.

PPT #14 - KNIFE

9. Sea Anchor - the one large Sea Anchor is tethered to the side of the raft. It improves stability of the raft and reduces drifting. Deploying the large Sea Anchor creates the upwind end.

PPT #15 - LARGE SEA ANCHOR

 The <u>upwind</u> end is the direction <u>from</u> which the wind is blowing. ⇒UPWIND

 The <u>downwind</u> is the direction <u>in</u> which the wind is blowing.

⇒DOWNWIND

10. Small Sea Anchor - there are two small sea anchors/ stabilizers that are built into the raft and automatically deploy to prevent the raft from spinning. PPT #16 - SMALL SEA ANCHOR

11. Raft Manual - explains how to use the pieces of equipment located on the specific raft. Depending on the manufacturer, the raft manual may be located on the raft or in the survival kit.

PPT #17 - RAFT MANUAL

12. Bailing Bucket - a bailing bucket will be attached to the raft. It is used to keep the raft floor as dry as possible (a Bailing Bucket may be found on the raft or in the survival kit).

PPT #18 - BAILING BUCKET

13. Canopy Installation Instructions - attach each canopy rod through loop and snap it to the socket.

PPT #19 - CANOPY INSTRUCTIONS

14. Survival Kit - attached outside of the raft between the upper and lower inflation chambers by a retrieving line. Upon raft inflation, the survival kit can be retrieved by pulling on the retrieving line (contents will be discussed shortly).

PPT #20 - SURVIVAL KIT

V. SLIDE/RAFT

PPT #21 - SLIDE/RAFT

A. Components and Equipment

- 1. The equipment on the slide/raft is the same as the equipment on the raft.
- 2. Due to different manufacturers, location of equipment and components may vary (A/C specific).
- 3. The items on the slide/raft are also labeled by bold print to identify their location.

4. Each slide/raft has:

Facti stide/fait has.
 Inflation valves
 Locator lights
 Boarding stations
 PPT #22 - INFLATION
 VALVES
 PPT #23 - LOCATOR LTS
 PPT #24 - BOARDING
 STATIONS

Life lines

Life lines
 PPT #25 - LIFE LINES
 Heaving ring
 PPT #26 - HEAVING RING
 PPT #27 - HAND PUMP

Hand pump

Raft knife PPT #28 - RAFT KNIFE PPT #29 - MANUAL SEA

Manual sea anchor

- Raft manual PPT #30 - RAFT MANUAL

 Survival kit. Some survival kits may need to be manually attached to the slide raft by the F/A. Some are found in the slide/raft.

Canopy installation instructions
 PPT #32 - CANOPY INSTALLATION

5. **Instructor note:** the bailing bucket is not on the slide/raft; it is in the survival kit.

VI. SURVIVAL KIT

PPT #33 – SURVIVAL KIT HANDS ON

PPT #31 - SURVIVAL KIT

ANCHOR

A. Contents and ELT

- 1. Certain survival kit items are common to both rafts and slide/rafts.
- 2. Additional items may be in a survival kit, depending on the A/C.

3. We will review common items, and the instructor will point out additional items, which may be found in a survival kit.

B. Survival Kit Exercise - Set-Up

- 1. You will work in groups of two.
- 2. Each group will receive a card with the name of a survival kit item on one side, and the InFlight Manual section that corresponds with this item on the other side.
- 3. Point out item on equipment board in the front of the room and return to your seats.
- 4. **ALLOW** candidates 5 minutes to use their InFlight Emergency Manual to locate the use and the operation of the item.
- 5. Each group will take turns standing in front of the class to explain the use and operation of their particular item.

C. Begin Exercise

- 1. **REQUEST** each group to take their turn by item, as listed.
 - ALLOW candidates to provide the overview, then fill in the gaps using the information provided.
- 2. Bailing Bucket Chapter 11, Page 3.
 - Remove excess water from the raft floor or canopy.
 - Collect rainwater or dew from canopy.
- 3. Sponge Chapter 11, Page 3.
 - Remove excess water from the raft floor or canopy.
 - Collect rainwater or dew from canopy.
- 4. Canopy Chapter 11, Page 3.
 - Used for protection.
 - Erecting the canopy:
 - Start at the upwind side, ensuring canopy aligns with the boarding stations.

- Instructor note: Canopy instructions for rafts and slide rafts for other EOW A/C are located in the IEM in the appropriate A/C section.
 - Install each rod through the loop and attach snap (begin by inserting the rod from inside the raft, up through the loop).
 - Attach each canopy snap to the installed rod.
 - Assemble canopy mast. Install in center of the canopy and then place other end into the floor mast.
 - Adjust canopy side curtains, tie to fully close.
- 5. Flares Chapter 11, Pages 4.
 - Used to signal rescue vehicles (there are three types of flares:
 - Metal Flare
 - Sky Blazer XLT
 - Penjector Mini Flare 3 (A330).
 - Today, we will focus on Metal Flares and Sky Blazer Flares.
 - Metal Flare: Night End
 - Red cap
 - Three raised bumps (so you can feel in the dark)
 - Emits red flame
 - Some smoke may be created (for day use) by holding night end of flare at an angle, close to the water.
 - Caution: will ignite almost immediately.
 - Metal Flare: Day End
 - Smooth orange cover
 - Emits dense smoke
 - Possible ignition delay
 - One Metal Flare per Survival Kit. Duration is less than 45 seconds.
 - Operation:
 - Remove plastic cover
 - Pull ring located under ignite cap
 - Flares to be held over the water when activated to prevent the sparks from dripping onto the raft/slide raft, and thereby burning holes in the raft/slide raft.
 - Tile flare away from your face and others.

- Only piece of equipment deployed at the downwind end of the raft.
- The downwind end is the direction in which the wind is blowing.
- Sky Blazer XLT Flare (Day/Night) Chapter 11, Pages 4.
 - Use flare downwind.
 - Ten seconds duration.
 - Two in each Survival Kit.
- Operation:
 - Press top flare drop down
 - Pull down to lock
 - Unscrew cap
 - Hold above head
 - Pull chain to launch
- 6. Repair Kit IEM, Chapter 11, Page 5.
 - Used to repair raft punctures. Instructions are provided in the survival kit.
 - Two metal and rubber patch seals are in each kit.
 - Operation:
 - Loop safety cord around wrist to prevent loss.
 - Dip plug in water to make insertion easier.
 - Push bottom plate through hole in fabric.
 - Pull bottom plate back against inner fabric surface and slide top plate over screw against outer fabric surface.
 - Adjust plug to cover hole completely and hold it in place.
 - Screw wing nut down firmly.
- 7. Sea Dye Marker Chapter 11, Page 5.
 - Illuminates surrounding water with florescent color and lasts for several hours.
 - Use only when rescue vehicle is seen or heard.
 - Operation (Tea bag type):
 - Secure at upwind-end.
 - Pull tab to unseal package and expose bag of dye.
 - Toss into water.

- Functions like a "tea bag." May be retrieved from water and saved for later use.
- Intensity decreases with use.
- Operation (Airbus type)
 - Open by unscrewing the top of the cylinder.
 - Pour the powder into the water at the upwind end.
 - The color will trail the raft.
- 8. Signaling Mirror Chapter 11, Page 5.
 - Used to signal rescue vehicles.
 - Visible for miles, even on hazy days.
 - Operation:
 - Slowly bring mirror to eye level and look through sighting hole. You will see a bright light spot (aim indicator).
 - Hold mirror close to eye and slowly turn until aim indicator is on target.
 - Reflect sunlight from mirror onto target. Continuously sweep horizon.
- 9. Water Activated Flashlights Chapter 11, Page 5.
 - Water activated
 - Used to signal in darkness
 - Provides needed illumination
 - Light lasts about 6-8 hours
 - Operation:
 - Remove stopper and fill with salt water or wastewater.
 - Empty chamber to deactivate, replace stopper.
 - When light starts to fade, repeat operating steps.
- 10. Purified Drinking Water (actual canteen), Chapter 11, Page 6.
 - A small quantity of water used for medicinal purposes only.
 - Directions are also on canteen.
- 11. First Aid Supplies Chapter 11, Page 6.
 - Bandages, ointment, etc.
 - Contents may vary.

- 12. Whistle Chapter 11, Page 6.
 - Used to signal other rafts and/or individuals.
- 13. Hand Pump Chapter 11, Page 6.
 - Located in the raft or slide/raft.
 - It is an important piece of equipment to help keep the raft or slide/raft afloat.
 - Inflate and deflate raft and deck float.
- 14. Raft Manual (actual manual) Chapter 11, Page 6.
 - Found either on the rafts itself, or in the Survival Kit.
 - Includes procedures for operation and installation of the raft/slide raft equipment.
- D. Additional Equipment Chapter 11, Page 6.
 - 1. These are pieces of equipment, in addition to the above items, that may be present.
 - 2. **DISPLAY** each item and briefly explain.
 - Hard Candy "Charms" (for diabetic persons to provide sugar)
 - Utility Knife (various uses)
 - Water Purification Tablets (purifies water not salt water).
 - Marezine Tablets (for seasick victims)
 - Light Safety Stick (only B767-200, signals rescue, lasts 12 hours), two per kit.
 - Operation:
 - Break inner glass by bending light stick tubing allowing chemicals to run together and shake.
- E. Emergency Locator Transmitter (ELT)

PPT #34 - ELT

- 1. Device used to dispatch signals by means of radio waves for the guidance of rescue vehicles.
- 2. There are two ELTs onboard, located inside the A/C.
 - Specific locations per aircraft
- 3. **Instructor note:** The instructor will be responsible for reviewing the steps for the ELT.

- 4. ELT is a vital piece of equipment for survival.
- 5. After retrieving the survival kit, deploy ELT by:
 - Partially unraveling the ELT lanyard and securing it to the raft, or slide/raft at upwind end.
 - Toss into water, clear of raft or slide/raft.
- 6. Transmission time is 24-50 hours.
- 7. The brackets that hold the ELTs may be different on some aircraft.
 - An 'L' type bracket may have been added to support the top of the ELT.
- 8. **ASK:** Are there any questions? If not, let's take a 10 minute break before continuing.

PPT #35 - BREAK

VII. THREE "S'S" OF SURVIVAL

A. Explanation

- 1. The Three "S's" of Survival is a memory aid for survival
- 2. The Three "S's" are used to prioritize survival steps in a water landing.
- 3. They are seaworthiness, signaling and survival.
- 4. Our focus will be the raft, not slide/rafts.

B. Seaworthiness

PPT #36 - SEA WORTHINESS

- 1. Process used to ensure your raft remains secure and afloat.
- 2. Retrieve and deploy raft.
- 3. Inflate raft/Torus Tube, using hand pump, if necessary to add air.
- 4. Stabilize raft via proper distribution and boarding techniques.
- 5. Retrieve survival kit.

- 6. Deploy the sea anchor.
- 7. Make necessary repairs using the repair kit.
- 8. Refer to raft manual for use of any equipment on the raft.
- 9. When necessary, cut the mooring line using the knife.

C. Signaling Items

PPT #37 - SIGNALING

- 1. Process used to alert rescue vehicles and personnel.
- 2. Flare
- 3. Flashlight
- 4. Signaling Mirror
- 5. Whistle
- 6. Sea Dye Marker
- 7. Deploy ELT

PPT #38 - SURVIVAL

D. Survival

- 1. Survival phase lasts from impact to rescue.
 - Use all available resources to protect your customers and crew until rescue arrives.
- 2. Follow all measures to combat exposure.
 - Install Canopy
 - Use bailing bucket and sponge to remove excess water.
 - Portable water (medicinal purposes)
 - First Aid care for injured passengers
 - Keep life vest on until rescued
- 3. Let us take a closer look at the Three "S's" of Survival and review the use of each applicable piece of emergency equipment.
- 4. **SHOW** video Water Evacuation and Survival (24:00)

SHOW VIDEO

VIII. EXPOSURE

A. Frigid Conditions

- 1. The video discussed two types of exposures we may face in a water landing.
- 2. These conditions include frigid and tropical.
- 3. **REFER** candidates to the Emergency Procedures Home Study Section IV, Pgs. 12-15.
 - REQUAL Handout Copies of Section IV, Pgs. 12-15.
- 4. In frigid conditions, Hypothermia may result.
 - Can occur in water temperatures as warm as 70 degrees Fahrenheit.
 - Danger is imminent in water temperatures of 50 degrees Fahrenheit or less.
 - Exposure and exhaustion can escalate the effects of Hypothermia.
- 5. Symptoms of Hypothermia include:
 - Shivering
 - Slurred Speech
 - Mental Confusion
 - Withdrawal and Apathy
- 6. The proper treatment for Hypothermia is:
 - Rewarm him/her slowly.
 - Body-to-body contact is best.
 - Handle the body gently because the skin is sensitive and numb.

B. Prevention Methods

- 1. There are ways you can help prevent Hypothermia from occurring when in frigid conditions.
- 2. For evacuees inside the raft, use the Bailing Bucket and sponge to keep the raft dry.

3. An evacuee alone in the water should be instructed to use the Heat Escape Lessening Position, or H.E.L.P.

PPT #39 - H.E.L.P.

- Individuals should draw knees to chest in a fetal position.
- Maintains core body temperature.
- 4. Two or more evacuees can group together to keep warm, PPT #40 HUDDLE using the Huddle position.
- 5. Both positions protect the sides, armpits and groin, which, along with the head and neck, make up the five vital areas through which 50% 80% of body heat is lost.
- 6. Whether alone in the water, or in a group, keep as much of the body as possible out of the water.

C. Tropical/Hypothermia

PPT #41 - BLANK

- 1. In Tropical conditions, heat exhaustion and heat stroke are potential dangers.
- 2. Heat Exhaustion be alert for these symptoms:
 - Unusually tired and weak.
 - Headache
 - Nausea
 - Profuse Perspiration
 - Normal body temperature
- 3. The proper treatment for heat exhaustion is: (Chapter 7, Page 31).
 - Turn on air vent.
 - Recline passenger.
 - Give cool glass of water every 10-15 minutes.
- 4. Heat Stroke be alert for these symptoms (Chapter 7, Page 31).
 - Weak/sick/dizzy
 - Headache
 - Dry Skin
 - High body temperature indicated by an extremely fast pulse rate.

- 5. **ASK** for a volunteer to read the proper treatment for heat stroke from the IEM.
 - Keep passenger cool.
 - Turn on air vent and recline passenger seat.
 - Give nothing by mouth.
 - Wrap body in wet blankets or other material and fan it.
 - Treat for shock.

IX. F/A PROCEDURES (UNPLANNED)

A. Pre-Impact

- 1. **FACILITATE** discussion using the following questions.
- 2. ASK: Define an unplanned water landing.ANS: Forced into the water with no time to prepare.
- ASK: What signal from the flight deck indicates an unplanned emergency?
 ANS: PA Announcement, "Brace for Impact," or other prearranged signal.
- 4. **ASK:** What are the initial commands? **ANS:** "Bend Over, Heads down, Stay down!"
- ASK: What exits would most likely be useable in the event of a water landing on an EOW aircraft?
 ANS: Aircraft doors equipped with slide rafts See Chart IEM, Chapter 11, Page 7.
- 6. There will be exceptions for some A/C overwing exits because they are equipped with non-detachable slides. Remember, that should conditions warrant, or the situation necessitate, use good judgement and proceed from the blocked exit to the nearest available exit.

B. Post-Impact

- 1. Following the evacuation command from the flight deck:
 - Release seat belts
 - Ensure ELS is activated
 - Assess conditions and redirect if necessary
 - Ensure slide/raft inflates

- Command:
 - Passengers to release seat belts grab seat cushions
 - ABPs to help as required
 - Evacuation
 - Passengers to inflate life vest
- Assist incapacitated passengers and crew
- 2. **ASK:** What items would you retrieve from the A/C, time and conditions permitting?

ANS:

- First Aid Supplies
- Megaphone
- Flashlight
- Bags
- Bottled Water
- Emergency Manual
- ELT
- 3. **ASK:** After deploying a raft or slide/raft, how would you disconnect from the A/C if it begins to sink or danger is imminent?

ANS: Cut the mooring line with the knife.

X. F/A PROCEDURES (PLANNED)

A. Pre-Impact

- 1. **ASK:** What is the definition of a planned water landing? **ANS:** Forced water landing with time to prepare.
- 2. **ASK:** What signal would you receive from the flight deck to indicate there is an emergency?

ANS: Six-Bells

- 3. **ASK:** What is the F/A's responsibility at this time? **ANS:** "A" F/A contacts flight deck, by interphone, to receive the T.E.S.T. information, while the other F/As secure galleys and retrieve manuals and report to the FWD galley (additional A/C specific responsibilities may apply).
- 4. After the "A" F/A relays the T.E.S.T. information and briefs the other F/As, prepare the cabin using the A/C specific cabin preparation for ditching.

5. **ASK:** What life vest does the F/A use for the cabin prep demonstration?

ANS: Actual crew life vest, not demo life vest.

6. **ASK:** If the flight were full, how would you demonstrate the seat bottom cushion?

ANS: Point out on Safety Instruction Card.

7. **ASK:** What are the commands upon receiving the brace signal?

ANS: "Bend over, Heads down, Stay down!"

8. **ASK:** If time is short, how can we save time during the cabin prep?

ANS: The seatbelt drill is optional. The demo may be skipped, however, you must still read the information reminding passengers to fasten seat belts.

- ASK: What exits will the F/A be pointing out?
 ANS: Most likely useable exits, as noted in the IEM and on the Safety Information Card.
- 10. After the cabin has been prepared, advise the captain, take jumpseat, and assume brace position.

B. Post Impact

- 1. Assess and prepare the escape routes or direct passengers away from unusable exits
 - Inflate slide/raft or raft
- 2. Shout evacuation and raft loading commands.
 - Including when to inflate the life vest
- 3. Assist incapacitated passengers and crew.
- 4. Remove appropriate emergency equipment from A/C.

XI. ABP BRIEFING

- A. ABP Briefing Door EOW
 - 1. **ASK:** When conducting an ABP Briefing, what should you use as a guide?

ANS: Planned Ditching ABP Checklist (per specific A/C).

- 2. **REFER** to IEM, Chapter 12, Water Checklist as additional briefing items are pointed out.
- 3. When briefing ABPs for a water landing on EOW-equipped A/C, the steps listed are in addition to those for a land evacuation and include instructing ABP #1 to:
 - Shout the commands: "Come this way. Leave belongings. Grab seat cushions, enter raft."
 - Remove ELT (radio beacon) from this location (show location).
 - Board raft with ELT (once passengers have exited your area).
 - Release raft from aircraft.
 - Lift "For Ditching Only" flap located at raft entrance.
 - Pull the quick-release handle.
 - If A/C starts to sink detach the raft by cutting the mooring line with the knife attached to the raft.
 - Pull in the survival kit and deploy the sea anchor.
 - Tie ELT to raft and place in the water.
 - Follow instructions in survival manual located in survival kit.
- 4. Instruct ABP #2 and #3 to:
 - Take me into the raft and inflate my vest.
 - Direct passenger into water or back of raft.
 - Evenly distribute weight in raft.
 - Direct passengers to inflate life vests.
- B. ABP Briefing Window EOW
 - 1. When briefing ABPs at the overwing window exits in a water landing, on EOW-equipped A/C, instruct both ABPs to:
 - Release seat belts and block exits.

XII. CONCLUSION

A. Summary

1. In a water landing, EOW-equipped A/C have the additional equipment and procedures necessary for improved survivability.

- 2. Upon learning each individual A/C, you will be able to apply these general procedures, along with any additional specific procedures related to an A/C.
- 3. **ASK:** Are there any questions?

XIII. RAFT DRILL

A. Set-Up

1. CLT: We are going to simulate a raft drill using the 46 person raft located in the raft room.

PHX: We are going to simulate a raft drill using the slide/raft.

- 2. **ASK** for a volunteer to act as the raft or slide/raft commander.
- 3. **PROCEED** to the raft or slide/raft room.
 - The raft or commander will need to bring their IEM to the raft.
- 4. **ASK** for three volunteers to be the ABPs.
 - The ABPs will assist the raft commander with securing and deploying the raft.
- 5. Use of equipment board/"other items" table.
 - Procedures state "Time/conditions permitting, remove emergency equipment & other items as needed."
 - As raft commander, please ensure this step is accomplished using:
 - Equipment board
 - "Other items" table

B. Objective

- 1. You will participate in a raft or slide/raft drill and accomplish the following:
 - Demonstrate/Observe proper raft commander procedures (as applicable)
 - Don a life vest (Transition Classes Only)
 - Board a raft or slide/raft.

- Locate and describe the operation of raft components and equipment.
- Instructor note: Initial New Hire Only. We will don and inflate life vests when the actual water drill is conducted later in the program.

C. Three S's of Survival

- 1. We would properly don the yellow passenger life vests.
 - Raft commander would don crewmember life vest.
- 2. CLT: The raft commander would secure and deploy the raft per procedure.

PHX: The slide/raft commander would inflate the slide/raft per procedure.

- 3. **REVIEW** ABP and raft inflation steps: (CLT)
 - ABP #1 would hold people back so that the F/A can operate the exit.
 - ABP #2 and #3 would retrieve the raft and assist in placing at the useable exit.
 - Step 1: Secure mooring line to an object, such as handholds or chair armrest to prevent drifting and launch clear of aircraft.
 - Step 2: Pull mooring line until the line no longer slacks and you can see the red flag.
 - Step 3: Stand sideways and pull hard on mooring line with a sweeping motion to inflate.

(PHX)

- ABP's would hold people back until the F/A has operated the exit and inflated the slide raft.
- 4. Our raft or slide/raft has inflated; we can begin the exercise.
- 5. Raft commander; begin evacuating passengers from A/C into raft or slide/raft.
 - Shout appropriate commands to board raft.
 - "You go this way, You go that way."
 - Shout to all evacuees:
 - Stay low and crawl in raft.

- Sit facing inward.
- Distribute weight evenly "You go this way, You go that way."
- 6. Raft commander, complete emergency equipment/"other items" retrieval duties prior to boarding.
 - Assume time/conditions permit
 - Remove emergency equipment
 - ELT
 - Megaphone
 - Flashlight
 - Remove other items needed
 - Refuse Bags
 - Bottled Water
 - Emergency Manual
 - Instructor note: Ensure raft commander gathers emergency equipment/"other items" listed above.
- 7. We will now discuss a few steps that need to be accomplished after boarding raft or slide/raft.
- 8. **ASK:** What is the first thing you will retrieve?

ANS: Survival Kit/Equipment Pouch

- **DIRECT** a candidate to retrieve the survival kit.
- 9. **ASK:** What step will establish stability and the upwind end of the raft?

ANS: Deploy the Sea Anchor

- DIRECT a candidate to locate and deploy the Sea Anchor.
- **PHX:** After the sea anchor has been deployed, the commander must release the slide/raft from the aircraft by lifting the 'for ditching only' flap and pulling the quick release handle. Stay moored to aircraft via the mooring line unless danger is imminent.
- 10. **ASK:** How would you retrieve an evacuee stranded in the water?

ANS: Heaving Ring

 DIRECT a candidate to locate the Heaving Ring and explain how to retrieve an evacuee.

B. Signaling

- 1. **FACILITATE** using a question and answer format.
- 2. **ASK:** What piece of equipment will you need to tie and deploy at the upwind end?

ANS: ELT

- DIRECT Raft Commander to tie ELT and deploy wind.
- 3. **ASK:** When rescue seems imminent, what five pieces of equipment will you utilize?

ANS: Flare Downwind (only item to go downwind).

- Sea Dye Marker
- Water Activated Flashlight
- Whistle
- Signaling Mirror
- 4. We are going to locate certain pieces of equipment.
- 5. **Instructor note:** If candidates can not explain use, ask raft commander to locate in FAEM.
- 6. **HOLD** up a picture of the equipment that the candidates are to locate and explain. The back of the picture lists where the information is located in the FAEM.
 - Survival Kit
 - Lifelines
 - Hand Pump
 - Inflation Valves (center, upper, lower)
 - Sea Anchor
 - Boarding Stations
 - Knife
 - Bailing Bucket
 - Locator Lights
 - Canopy Installation
 - Heaving Ring

C. Survival

1. **ASK:** What is the best defense to combat any frigid/tropical conditions?

ANS: Canopy

2. I am going to explain how we would erect the canopy.

- 3. We will erect the canopy (Transition Classes Only).
 - During the water drill, later in the program. (Initial New Hire Classes Only).
- 4. **EXPLAIN** how to erect raft canopy:

Instructor note: PHX Transition classes should follow slide/raft canopy instructions.

- Raft commander will distribute rods to candidates and explain the steps for erecting the canopy.
- Step 1: Ensure the canopy widows align with boarding stations
 - Black lettering on canopy should face candidates
- Step 2: Install each rod through the lifeline loop and attach to snap.
- Step 3: Starting at upwind end, attach canopy snaps to each installed rod.
- Step 4: Assemble canopy mast. Install in the center of the canopy and then place other end into the floor mast stand.
- Step 5: Adjust canopy side curtains; tie to fully close.
- 5. **ASK:** If it gets hot in the raft. How can we let some fresh air in?

ANS: Open side curtains.

- 6. **REVIEW** additional guidelines.
 - Open the downwind canopy entrance before the upwind side to prevent the canopy from collapsing when the sides are down and some activity must take place at the upwind entrance.
 - A slightly deflated raft chamber is more stable in rough seas. Also remember that in heat the raft will expand. To deflate the raft, remove the hand pump adapter (attached to the slide) from the pouch on the raft, remove the protective cover and insert the threaded end into the slide valve. Press down on the white collar inside the adapter until sufficient air is released.
 - Tie down supplies in case raft capsizes.

- Attempt to move the raft away from areas of fuel spillage.
- To prevent receiving a shock from the electrical current when rescue is conducted using a helicopter, allow the basket to touch the water before touching the basket.
- 7. **ASK:** During a heavy storm, what can we do to drain excess water so the weight does not cause the canopy to collapse?

ANS: Push up on the canopy.

- 8. **ASK:** When can you take your life vest off? **ANS:** Not until you have been rescued.
- 9. To disassemble the raft canopy
 - The raft commander would give instructions on how to disassemble the canopy.
 - Begin at the downwind end.

XV. CONCLUSION

- A. **THANK** the candidates for doing a nice job.
- B. **ASK:** Are there any questions?
- C. **REQUEST** candidates exit the raft and return to the classroom.



Inflight Training New Hire

WATER LANDINGS I (NON-EOW)

Objective: The candidates will be able to: Differentiate between Non-EOW equipped A/C, seat cushion and/or life vest

Demonstrate life vest and seat cushion use

Recognize the steps of quick-release slides

Recognize the various detachment methods

Perform a planned water landing cabin prep

Time: 2:00 (Requalification/Transition time may vary)

Method: Lecture/Demonstration/Video/DVD/PPT

Training Aids:

* VHS Video: Accident Review – US Air Flt. 5050 (Rev.10/98)

* Announcement Booklet

* Inflight Emergency Manual

* DVD: Slide / Raft Procedures (REC 2007/08)

* (1) Infant life vest in package (unopened)

* (1) Crew life vest in package (unopened)

* (1) Passenger life vest in package (unopened)

* (2) B737-300 Safety Information Cards

* Seat cushion for demonstration

* PPT: W:\Initial Menu\Week Three\Water Landing I

* Child LV picture board

* (1) Infant life vest

* (2) Seat belts

* (1) Baby doll

* (3) Crew life vests

*Requal ONLY: 1 CO₂ cartridge

Prerequisites: * Planned Emergencies

* Unplanned Emergencies

* ABP Briefings - Land Evacuation

Homework: **Before Class:**

Read – IEM: Chapter 11 Ditching and Chapter 15 B737

Read – Emergency Procedure Home Study: Section IV Ditching

Proficiency: Emergency Procedures Exam – 90% or better

Instructor Prep:

F.A.R. Training Requirement: 121.417(b)(2)(i) Emergency training must provide the following: Individual instruction in the location, function, and operation of emergency equipment including equipment used in ditching and evacuation. 121.417(b)(3)(iii)Emergency training must provide the following: Instruction in handling of emergency situations including ditching and other evacuation, including the evacuation of persons and their attendants, if any, who may need assistance of another person to move expeditiously to an exit in the event of an emergency.

> CURRICULUM: Initial New Hire SEGMENT: General Emergency MODULE: Water Landings I (NonEOW) AUTHOR: D.A.

FILENAME: w:\curriculum\initial new hire\emergency procedures\original\water landings I (non-eow).doc 02/12/08 EMK

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I. INTRODUCTION

PPT #1 - TITLE

A. Overview

- 1. There are two types of emergency landings in water, planned and unplanned.
- 2. 80% of accidents occur during the take-off or landing phase of flight. A water landing is a real possibility due to the fact that many airports we serve are located near a body of water.
- ASK: What airports does US Airways serve that are located near water?
 ANS: TPA, PBI, MIA, LAX, SFO, LGA, BOS, DCA, and many more.
- 4. In any emergency situation, you must always be alert and ready to assume your evacuation duties and responsibilities. You must be ready for the unexpected.
- 5. ASK: How can we be prepared for the unexpected?
 ANS: Through the preflight briefing

 30-second review
 Know where the emergency equipment is located and how to operate

B. Objective

- 1. You will be able to:
 - Recognize Non-EOW equipped aircraft
 - Demonstrate life vest and seat cushion use
 - Recognize the steps of quick release slides
 - Recognize various detachment methods
 - Perform a planned water landing cabin prep
- 2. Let us begin exploring water landing procedures for Non-EOW equipped A/C.

II. NON-EOW EQUIPPED AIRCRAFT

- A. These aircraft have no equipment onboard for a water landing.
 - 1. These A/C fly routes up to, but not to exceed, 50 nautical miles from shoreline.
 - 2. These A/C are not equipped with any additional items required for over water travel.
 - 3. Seat cushions are the primary means of flotation for the passengers.
 - 4. The evacuation slides at the doors can be released from the A/C and used for additional flotation.
- B. Life Vest (LV) equipped Aircraft
 - 1. Aircraft that are equipped with passenger life vests can travel routes that exceed 50 nautical miles from shoreline, but only up to 162 nautical miles.
 - 2. The evacuation slides can be quick-released from the A/C and used for auxiliary flotation (i.e., infants, injured passengers and extra supplies).
 - These slides are not designed to be used as rafts.
 - 3. Primary means of flotation is a life vest.
 - Aircraft must be equipped with passenger life vests for each occupant.
 - 4. The captain will inform the crew when a life vest demonstration is required.
 - The captain receives a code on the flight plan, which indicates when it is necessary to demonstrate the life vest.
 - Even if a demonstration is not required, the life vest portion must be read from the announcement booklet.
 - 5. Additional flotation includes a seat cushion.

C. Seat Cushions

- 1. All passenger seat cushions can be used for flotation.
- 2. They stay afloat for approximately 8 hours.
- 3. All departure announcements and the Safety Information Cards review the use of the seat cushion.
- 4. **ASK** one candidate to read the paragraph from the B737-300 departure announcement that addresses seat cushions.
- 5. **ASK** another candidate to point out the seat cushion on the Safety Information Card.

D. Life Vest - Crew

1. Crew Life Vests are orange and are equipped with water-activated locator lights.

DISPLAY Crew Life Vest

- 2. Primary means of flotation.
- 3. All A/C have crewmember life vests.
- 4. Always located near the jumpseat (specific area for each A/C).
- 5. **ASK:** What is the pre-flight for crew life vests?
 - 1 present per F/A jumpseat position and verify in good condition.

E. Life Vest – Passenger

- 1. Passenger life vests are yellow and are equipped with water-activated locator lights.
 - DISPLAY Passenger Life Vest
- 2. One life vest per occupant seat.
 - Each life vest must be equipped with a water-activated locator light.
 - Most life vests are located under each passenger seat.
 - Exception will be A/C specific.

- 3. The life vests are sized for adults and children over 35 pounds.
- F. Departure Announcement with Life Vest Demonstration
 - 1. **REQUEST** one candidate to read the life vest portion of the Departure Announcement paragraph for B757 from the announcement booklet. Starting after, "Add for all life vest equipped A/C..."
 - 2. **ASK** another candidate to demonstrate donning and securing the life vest as that portion of the announcement is being read.
 - ASSIST and direct, as necessary.
 - 3. **Instructor note:** Announcement in the announcement booklet.
 - A life vest is located under the seat.
 - To wear it, tear open the plastic package, remove the life vest and slip it over your head.
 - Wrap the strap around your waist, snap the two ends together and tighten.
 - Inflate the vest by pulling down on one of the red tabs, saving the other chamber as a back-up.
 - The vest can be manually inflated by blowing into one of the red tubes and is equipped with a water-activated locator light.
 - It is important that you do not inflate your life vest until <u>after</u> exiting the A/C.
- G. Life Vest Donning Procedures Child (Passenger Life Vest)
 - 1. Procedures used on children 35-90 pounds.
 - 2. **DISPLAY** child life vest picture board.
 - 3. Procedures for donning a life vest for a child are the same as an adult's, with an additional step:
 - Place strap through child's legs
 - Snap the ends together
 - 4. Procedures for donning a life vest for a child are not demonstrated during the safety briefing. It would be addressed individually.

H. Life Vest – Infant

- 1. There will be ten infant life vests onboard.
- 2. These life vests are for infants/children up to 35 lbs.
- 4. **CHOOSE** one candidate to demonstrate the procedures for donning an infant life vest, as the instructor reads the following procedures (#5).
 - Instructor note: Candidate will use the baby doll to illustrate the procedures for donning the infant life vest.
- 5. Procedures for donning an infant life vest:
 - Slip life vest over head
 - Place one leg over harness loop
 - Pull snug, not tight
 - Snap ends together
 - Tether strap loop is for caregiver use
- 6. **DISPLAY** tether strap stowage location (on top of life vest and between chambers) and how snaps are released.
- 7. **PASS** around baby doll with donned infant life vest.

III. INFLATING AND DEFLATING A LIFE VEST

A. Demonstration

- 1. **ASK:** When would you inflate your life vest? **ANS:** After exiting the A/C
- 2. **ASK:** Why?

ANS: It may puncture as you egress the A/C, and if the aircraft fills with water, it may hinder your ability to exit.

- 3. **CHOOSE** two candidates to demonstrate and explain how to inflate/deflate a life vest.
 - One candidate will demonstrate inflating a life vest automatically.
 - The other candidate will demonstrate inflating a life vest manually. Then both candidates will demonstrate deflating the life vest.

B. Inflating Life Vests Automatically

- 1. **REQUEST** the candidate to don the life vest.
- Initial Training REQUEST the candidate to simulate inflating the life vest by pulling on the red tab, saving the other chamber for as a back-up.
 Requal Training REQUEST the candidate to inflate the life vest by pulling on the red tab, saving the other chamber for as a back-up.
- 3. Remember, the second chamber may be needed in the event the first chamber fails, due to a puncture or leak.
- 3. <u>Initial Training</u> When we go to the pool for our raft drill everyone will get a chance to inflate a life vest.

 <u>Requal Training</u> **Instructor note:** Make sure one life vest has a CO₂ cartridge loaded in the vest.

C. Inflating Life Vests Manually

- 1. **REQUEST** the candidate to don the life vest.
- 2. **ASK:** Why would you have to manually inflate a life vest?

ANS: Both CO₂ cartridges fail, damage to chambers during egress, need more air for buoyancy.

- 3. **REQUEST** the candidate to simulate blowing into the red tube and inflating one chamber of the life vest.
- 4. It only takes a few strong breaths to inflate the life vest.

D. Deflating the Life Vest

- 1. **ASK:** Why would you need to deflate a life vest? **ANS:** Adjust for comfort.
- 2. **REQUEST** the candidates use one finger to depress the pressure release, located inside the manual inflation tube.
- 3. Squeeze the life vest to expedite the release of air from the life vest.

IV. SEAT CUSHION

A. Demonstration

- 1. **REQUEST** one candidate to read the seat cushion section from the Announcement Booklet, for the B737.
- 2. **ASK** another candidate to demonstrate the proper use of a seat cushion in the event of a water landing.
- 3. **Instructor note:** Announcement in the announcement booklet.
 - Your seat cushion serves as an approved flotation.
 - To remove it, pull up and take it with you to the nearest useable exit.
 - After exiting the A/C, place your arms through the straps and then hug the cushion to your chest.
- 4. Ensure the lip end of the seat cushion is underneath the chin, as illustrated on the Safety Information Card.
 - This allows for better buoyancy, as well as allowing a place to rest your head.
- 5. ASK: If the flight is full, what could the F/A use to demonstrate the removal of seat cushions?ANS: Safety instructions card.

V. USEABLE EXITS

- A. Water Landing
 - 1. The following procedures focus on Non-EOW A/C.
 - 2. We will discuss our usable exits.
- B. Overwing Window Exits
 - 1. In a water landing, overwing window exits are the probable useable exits.
 - There are some A/C specific exceptions.
 - 2. **ASK:** Why do you think the windows would be useable exits?

ANS: The window exits are located over the wings and would probably be above the water level.

- 3. Always direct passengers to exit off the leading (towards nose of A/C) edge of the wing, when in a water landing.
- 4. Trailing edge (towards the tail) probably under water and may be jagged.
- 5. Instruct ABPs to use the escape rope (on A/C, where applicable) and attach to loop located on the wing near the leading edge and inside window frame (A/C specific).
- 6. Wings can be slippery. This will aid passengers when entering water.

C. Door Exits

- 1. Keep in mind that depending on how the A/C lands in the water, or if it lands on something in the water, the FWD part of the A/C, or one side of the A/C, could be submerged.
 - **ASK:** What must you do before opening any exit?
 - **ANS:** Assess conditions
 - **ASK:** What are you checking for?
 - **ANS:** Fire, obstruction, is the exit above water level.
- 2. Due to the flotation of the A/C, the AFT doors on the B737-300 are most likely not useable. However, should conditions permit, and depending on the situation:
 - Use your good judgement
 - Use an exit after assessing and determining it is useable.
- 3. There will be exceptions when the AFT exits may be probable useable exits. Details will be A/C specific.

VI. QUICK-RELEASE SLIDES

PPT #2 - QUICK-RELEASE SLIDES

A. Definition

- 1. **REFER** to IEM, Chapter 11, Page 14.
- 2. A quick-release slide is a slide that can be released from the A/C after it has been deployed (inflated) and used for auxiliary flotation.

- 3. The slide must be quick-released to allow the passengers to evacuate into the water.
- 4. We are talking about evacuation slides only, which are found on most narrow-body A/C.
 - These slides are only to be used for auxiliary flotation; they are not rafts or slide/rafts, and have no survival equipment.
 - They are not designed to hold passengers like a raft.
- B. How to use a quick-release slide Type 'A' slide
 - 1. Assess Conditions (look and feel for water level, fire and obstruction)

- **Instructor Note:** F/A is using wrong side of hands to feel for heat.

CLIP #3 - ASSESS CONDITIONS

- 2. Open Door
 - Remember: the girt bar must be attached; the door must be armed.
 - Instructor Note: F/A is using wrong side of hands to feel for heat.

CLIP #4 - OPEN DOOR AND PULL INFLATION HANDLE

- 3. Pull Inflation Handle
 - Slide inflates
- 4. Lift the flap marked "FOR DITCHING ONLY"

CLIP #5 - QUICK-RELEASE

- 5. Pull the quick-release handle.
 - This will release the slide from the girt bar.
- 6. Instruct passengers to flip the slide over with the hollow end up to allow an open area on top.

PPT #6 - MOORING LINE

- Slide remains connected to the A/C via the mooring line (approx. 25 ft.).
- ⇒ARROW
- 7. As needed, place injured, elderly, infants/children and/or extra supplies into the hollow part of the slide.
- PPT #7 HOLLOW SIDE
- Instruct passengers to hold onto the slide.
- 8. Some mooring lines have tension straps that are designed to snap apart when force of the A/C places tension on the line.

PPT #8 - TENSION STRAP

9. If the mooring line does not have a tension strap, one of the various manual methods will be used:

CLIP #9 - DOUBLE "D" RING

- Double "D" Ring: There is an extra piece of folded material at the top of the slide.
 - Lift this material, obtain slack, align it through the rings and a loop is formed.
 - Separate the Velcro so the mooring line can pass through the ring.
 - **Instructor note:** Some B737-300 A/C.
- Pouch: In a pouch underneath the girt lacing area is a small pouch.
 - Unsnap the pouch; pull cloth material until the line separates.
 - **Instructor note:** Some B737-300 A/C
- Knife: Located at the top of the slide.

PPT #11 - KNIFE

CLIP #10 - POUCH

- Use the knife to cut the mooring line. Slide the line along the sharp area to cut.
- 10. We will apply these procedures as we learn each A/C's specific water landing procedure.

PPT # 12 - BLANK

VII. NON-QUICK RELEASE SLIDES

- A. B737 Type 'B' Slides
 - 1. B737 Type 'B' slides are not quick release and do NOT have a "For Ditching Only" flap.
 - 2. To detach the slide, release the girt bar from the floor mounted brackets.
 - 3. Push slide away from the aircraft.
 - 4. There is no mooring line slide will separate from the aircraft upon release of the girt bar from the brackets.

VIII. SLIDE TRANSFER

- A. Slides may also be removed and transferred from an unusable exit and deployed at a useable exit to be used for additional flotation (overwing window or door).
 - 1. A slide may be transferred only if time and conditions permit.

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- 2. Slide transfer procedures vary from one A/C type to another.
- 3. The following DVD illustrates slide transfer techniques for each A/C type.

- **SHOW** Slide / Raft Procedure DVD. (:8.5)

SHOW SLIDE/RAFT PROCEDURE DVD

IX. UNPLANNED WATER LANDING

A. Procedures

1. **SHOW** Video – Accident Review: US Airways Flight 5050 (Rev. 10/98) Time: 11 min. (aborted take-off).

SHOW VIDEO

- B. Unplanned Water Landing
 - 1. Forced water landing with no time to prepare.
 - 2. **ASK:** What is the signal from the flight deck to indicate an emergency landing?

ANS: A verbal command from the flight deck stating "Brace for Impact," or a prearranged signal determined during the preflight briefing.

3. **ASK:** Upon receiving the emergency signal, what actions should you take?

ANS: Assume brace position and shout commands.

4. **ASK:** What are the commands for an unplanned emergency?

ANS: "Bend Over, Heads Down, Stay Down"

- 5. **REFER** to IEM, Chapter 11, Page 16 to follow, Non-EOW ditching procedures.
- 6. ASK: When the A/C comes to a complete stop and you receive the signal to evacuate ("This is the Captain/first officer. Evacuate! Evacuate!"), what are your actions? ANS:
 - Release your seat belt and shoulder harness; shout commands to passengers, "Release seat belts and get out!"
 - Kick up jumpseat
 - Responsible F/A, turn on Emergency Light Switch (ELS)

- Assess exit (check water level)
- Shout: "Don life vests and/or grab seat cushions!" (as applicable)
- Don your life vest (accomplish as you are shouting your commands).
- At unusable exit:
 - Shout "Exit blocked!" give directions, such as "Turn around!" or "Cross over!"
 - Go to next choice/available exit
- At usable exit
 - Shout "Stand back!"
 - Open exit fully, lock in place
 - Pull inflation handle while securing self.
 - Stand back until slide fully inflates.
 - Quick-release slide from A/C (pull handle located under flap marked "FOR DITCHING ONLY!")
 - Begin evacuation and shout "Come this way!"
 "Leave belongings!"
 - In addition, repeat: "Don life vest!" and/or "Grab seat cushion!"
 - Command passengers to jump into the water and hang onto the sides of the slides.
 - Shout instructions on how to inflate the life vest (pull tab).
- 7. **ASK:** What would you do if a passenger came to the exit without a flotation device?

ANS: Make them exit, and when time is available, toss out seat cushions and/or life vests.

X. PLANNED WATER LANDING PROCEDURES

- A. Planned Water Landing
 - 1. Also know as Ditching.
 - 2. Forced water landing with time to prepare.
- B. Planned Water Landing Cabin Preparation Set-Up
 - 1. We are going to conduct a planned cabin preparation for a water landing on a B737-300.

- SELECT three candidates to be the F/A crew.
- I will be the captain. We will utilize demo equipment.
- The classroom will be the A/C and your classmates will be the passengers.
- This is not a graded exercise.
- Feedback will be provided at the end to heighten our awareness of policies & procedures.
- 2. **Instructor note:** During the cabin preparation, an instructor will facilitate the question/answer format and lead the candidates while performing the planned cabin preparation for water landing.
- 3. **SET-UP** the classroom like a B737-300.
 - PLACE two chairs in front of the classroom facing aft (double j/s).
 - PLACE two chairs in back of the classroom facing fwd (double j/s).
 - DESIGNATE one exit row.
 - MAKE classroom as real as possible (i.e., have a F/A dim or brighten lights).
 - REFER candidates to B737 Non-EOW Water Cabin Prep Cards in the manual.
 - DISTRIBUTE demonstration equipment, which includes Safety Information Cards, crew life vests, and seat belts.

C. Begin Cabin Preparation

- ASK: When in flight, what is the signal from the flight deck to indicate a planned emergency?
 ANS: Six bells from the flight deck means that there is a planned emergency situation.
- 2. **RING:** Six-Bells
 - Step one, Ask the Captain
 - "A" F/A will immediately contact the flight deck using the interphone and receive T.E.S.T. information.
 - We will begin with the "A" F/A on the interphone ready to receive the T.E.S.T. information.

- 3. **CAPTAIN**: "You will need to prepare the cabin for a possible emergency landing and evacuation. Due to our location, we will prepare for a water landing. You will need to begin evacuation after final impact."
 - T = You have 18 minutes to prepare the cabin.
 - E = Double engine flameout.
 - S = Standard brace signal.
 - T = "Please let me know when you have completed preparing the A/C, and I will update you on the situation at that time."
 - DETERMINE who will make the initial announcement if candidate does not.
 - Synchronize watches.
- 4. **ASK:** What will the other F/A(s) be doing? **ANS:** Stow carts
 - Secure galleys/turn off galley power
 - Retrieve Jackets (if applicable) and Cabin Prep Cards go to FWD galley.
- D. Step Two, Brief Other F/A(s)
 - 1. **ASK:** What is the "A" F/A relaying to the rest of the crew?

ANS: Relay information received from the flight deck.

- "A" F/A should brief other F/A(s) in an area away from the customers.
- This may be accomplished in the FWD galley.
- 2. **ASK:** What else will the "A" need to accomplish during this briefing?

ANS:

- Synchronize watches
- Establish timekeeper
- Review cabin section assignments:
 - The F/A's position determines where they will stand for the announcement portion of the cabin preparation.
 - An emergency demo position, cabin and exit responsibility chart is located within the Water Cabin Prep Non-EOW card.

- 3. **POINT OUT** that the "A" F/A can review who will brief the ABPs for the FWD/MID/AFT exits.
 - As a general rule, "A" F/A will brief the FWD exits;
 "B" F/A the AFT exits, and the "C" F/A the MID-cabin exits.
 - The other F/A(s) will retrieve Safety Information
 Cards, crew life vests and seat belt for demonstration.
 - "A" F/A should verify the F/A(s) understand assignments/duties, and give moral support (i.e., let's work as a team to make sure we accomplish everything).

4. Other Flight Attendant(s):

- Work as a team to accomplish the following:
 - Galleys secured, including the FWD galley.
 - Lock the LAVs.
 - Turn off the entertainment system, as applicable.
 - Remove galley curtains.
 - Turn cabin lights to bright.
 - Retrieve demo equipment.

E. Step Three, Begin Announcement

- 1. **ASK:** What should you do if the PA is not working? **ANS:** Use the megaphone
 - "A" F/A read announcement, via PA.
 - Use a calm, yet authoritative voice. This will reassure the passengers that everything is under control.
 - Remain visible.
 - Allow appropriate pauses for other F/As to accomplish duties.
 - Continually monitor cabin activity and time.

2. Other Flight Attendant(s)

- Take demonstration position
- Check cabin sections
- Verify passengers are seated
- Visually assess cabin for ABPs

F. Step Four, Life Vests/Seat Cushions

- 1. "A" Flight Attendant
 - Read information on use of seat cushions and life vests (if applicable).
 - Remember to don your crew life vest and passengers will be donning their life vests (if applicable).
 - "A" F/A will read how to don a child's life vest.
- ASK: If a seat cushion were not available for demonstration, how would you show seat cushion usage?
 ANS: Point out seat cushion on the Safety Information Card.
- 3. Other Flight Attendant(s)
 - Demonstrate seat cushion, or point out using safety information card.
 - **If applicable Demonstrate the proper steps for donning the life vest, as the instructions are read by the "A" F/A. Use crew life vest for demonstration, leaving it on. Assist passengers in donning their life vests.
 - Distribute infant life vests, as needed.

G. Step Five, Brace Positions

- 1. "A" F/A reads:
 - "Look at brace position on Safety Information Cards."
 - Allow F/A(s) time to hold up cards and point to brace positions.
 - Allow other F/A(s) to brief alternate brace positions, (pause).
 - Call F/A(s) back to position, if necessary.
- 2. Other Flight Attendant(s)
 - Point out brace positions on the Safety Information Cards.
 - Demonstrate standard brace position:
 - Feet flat on floor
 - Cross wrists

- Bend over (simulating seat back in front of you)
- Rest forehead on wrists
- Check passengers' brace positions.
- Brief alternate brace positions in cabin assignment areas.

H. Step Six, Brace Signal

- 1. "A" F/A reads:
 - "F/As will shout "Bend Over, Heads Down, Stay Down"
 - "Remain in Brace position until A/C comes to a complete stop."
- 2. Other Flight Attendant(s)
 - N/A
- I. Step 7, Seat Belt
 - 1. **Instructor note:** This part of the announcement gives the option to conduct the seat belt drill. If there is enough time, proceed and read the entire section.
 - 2. "A" F/A
 - Read entire section to conduct drill.
 - Pause to allow time for passengers to refasten their seat belts and other F/A(s) to check and assist.
 - Call F/A(s) back to demo position, if necessary.
 - 3. Other Flight Attendant(s)
 - Check for passengers who may need assistance.
 - Demonstrate seat belt, starting with it closed and show opening of seat belt.
 - Confirm passengers' seat belts are fastened.
 - 4. If time is too short, do not conduct the drill. However, F/A must read, "Again, make sure your seat belts are fastened."
 - 5. **ASK:** When demonstrating the seat belt, should you begin the demonstration with the belt fastened or released? Why?

ANS: Fastened. The point is to demonstrate how to release the seat belt.

6. ASK: Why is the seat belt drill so important? ANS: Most passengers are accustomed to seat belt operation in a car, which requires pressing a button to release.

J. Step Eight, Exits

- 1. "A" F/A reads:
 - Tell passengers to remove Safety Information Card from seat pocket in front of them.
 - Visually locate all exits for water evacuation noted on the card.
 - Note that the FWD and overwing window exits are most likely used for evacuation.
 - ENSURE candidates know where to locate exits on the Safety Information Cards.
- 2. Other Flight Attendant(s)
 - Hold up Safety Information Card
 - Point out exits.
- K. Step Nine, Low Level Lighting
 - 1. "A" F/A reads
 - 2. Other Flight Attendant(s)
 - Point out low-level lighting.
- L. Step Ten, ABP Briefings
 - 1. **FACILITATE** ABP Briefings one at a time so class can observe.
 - "A" conduct ABP Briefing, FWD doors
 - "C" conduct ABP Briefing, windows
 - Instruct ABP to exit A/C and connect lifeline to wing

- "B" conduct ABP Briefing, AFT doors
 - Briefs ABPs to block aft exits (2ABPs/ one for each door.)
- 2. **ALLOW** "A" F/A to read announcement, then conduct briefings. F/As can use appropriate water checklist, or section in IEM.
- 3. All Flight Attendants
 - If time is critical, use passenger closest to door exits (no need to relocate).
- M. Step Eleven, Pre-Landing Announcement
 - 1. "A" F/A
 - Read announcement
 - 2. Other Flight Attendant(s)
 - Conduct final cabin checks
- N. Step Twelve, Final Preparation
 - 1. "A" F/A
 - Advise Captain that cabin preparation is complete.
 - Dim lights
 - Take jumpseat
 - Take brace position
 - Conduct 30 second review
 - 2. Other Flight Attendant(s)
 - Take jumpseat
 - Take brace position
 - Conduct 30-Second Review
- O. Post-Landing
 - 1. **Instructor note:** Candidates should be in the jumpseat with crew life yest donned.
 - 2. Pilots gave brace signal.
 - Captain's PA announcement, stating, "Brace for Impact."

- Begin shouting commands, "Bend Over, Heads Down, Stay Down!"
- Remain seated in a brace position until A/C comes to a complete stop.
- Commands will be given to "evacuate" (i.e., "This is the Captain. Evacuate, Evacuate!" or "Remain seated.").
- If no commands are received, F/A will attempt to contact the flightdeck and initiate evacuation if passengers are in imminent danger.
- Remain seated, or begin evacuation, per Captain's direction.
- DIRECT candidates to remain seated.

P. Debrief Exercise

1. **ASK** candidates what they did well and what they could do better.

XI. CONCLUSION

A. Summary

- 1. Now, you are familiar with Non-EOW Procedures.
- 2. We will now explore our EOW equipped A/C.